1. **PURPOSE** - The purpose of this policy is to provide operational guidelines governing the use and administrative management of all Unmanned Aircraft Systems (UAS) technology utilized by the Phoenix Police Department.

   A. This policy provides Department personnel with guidance, and details the conditions under which, the Department will utilize UAS.

   B. The integration of UAS technology by the Department, in accordance with Federal Aviation Administration (FAA) requirements, is intended to enhance existing departmental capabilities in furtherance of the public safety mission.

      (1) The Department is dedicated to the security, safety, and preservation of life of its residents and employees.

      (2) The UAS technology is intended to provide an enhanced level of operational capability, safety, and situational awareness that can serve these goals and reduce the risk of injury.

      (3) The UAS program will be operating in accordance with federal, state, and local laws, in a responsible, legal, and transparent manner to maintain the public trust.

2. **POLICY**

   A. It shall be the policy of the Department to use UAS to enhance the Department's mission of providing for the public safety of all citizens in our community, while treating everyone with dignity and respect.

   B. Any use of the UAS will be in accordance with US and Arizona Constitutions, the FAA, department policies, and will respect the privacy rights of all citizens involved.

3. **SCOPE**

   A. Certified personnel may conduct UAS department operations in the following areas:

      - Planned and unplanned event management
      - Investigative support
      - Tactical support.

   B. Leveraging UAS technology is expected to maximize efficiencies and increase cost savings through enhanced service delivery.

4. **DEFINITIONS AND ACRONYMS**

A. ABBREVIATIONS AND ACRONYMS	
(1) ARS	• Arizona Revised Statutes
(2) BLOS	• Beyond Line of Sight
(3) CFR	• Code of Federal Regulations
(4) CI/KR	• Critical Infrastructure/Key Resources
(5) FBR	• Field Based Reporting
(6) FLIR	• Forward Looking Infrared
(7) GPS	• Global Positioning System
(8) HDB	• Homeland Defense Bureau
(9) IR	• Infrared
(10) LAANC	• Low Altitude Authorization and Notification Capability
(11) PCC	• Phoenix City Code
(12) PIC	• Pilot in Command
(13) TLO	• Terrorism Liaison Officer

4. A. (continued)

A. ABBREVIATIONS AND ACRONYMS	
(14) TMU	• Threat Mitigation Unit
(15) TSA	• Transportation Safety Administration
(16) UAG	• Unmanned Aircraft General
(17) VCB	• Violent Crimes Bureau
(18) VCU	• Vehicular Crimes Unit
B. DEFINITIONS	
(1) Above Ground Level (AGL)	• AGL is the altitude expressed in the actual number of feet measured above the ground.
(2) Air Traffic Control (ATC)	• Manages traffic from the airport to a radius of 3 to 30 miles. • Provide pilots taxiing and take off instructions, air traffic clearance, and advice based on their own observations and experience. • Maintains separation between landing and departing aircraft, transfers control of aircraft to the enroute center controllers when the aircraft leave their airspace and receives control of aircraft on flights coming in to their airspace.
(3) Certificate of Authorization (COA)	• Issued by the FAA and grants permission to fly within specific boundaries and parameters.
(4) Federal Aviation Administration (FAA)	• Federal agency in the United States and part of the Department of Transportation. • The FAA regulates U.S. civil aviation, U.S. commercial space transportation, operates control towers, builds, installs, and maintains electronic aids to navigation, and registers all pilots and aircrafts in the United States.
(5) National Airspace System (NAS)	• The NAS is made up of a network of air navigation facilities, ATC facilities, airports, technology, and appropriate rules and regulations that are needed to operate the system.
(6) Navigable Airspace	• FAA controlled airspace classified as: A, B, C, D, E – Class G airspace is uncontrolled.
(7) Notice to Airmen (NOTAM)	• A NOTAM is time critical information concerning the establishment, condition, or change in any component in the NAS. • The NOTAM provides knowledge that is essential to personnel concerned with flight operations in designated areas. • NOTAMs may be filed as a temporary change to the NAS as they were not known in advance to publish on aeronautical charts or other operational publications.
(8) Personal Identifying Information (PII)	• Includes a person's date of birth, social security number, personal telephone number, home address, personal email address, and official state or government-issued driver's license or identification number.
(9) Pilot	• Any member who has successfully met the criteria outlined by the UAS Program Manager for full flight duty.
(10) Remote Pilot-in-Command	• A person who holds a remote pilot certificate with an UAS rating and has the final authority and responsibility for the operation and safety of a UAS operation conducted under Part 107.
(11) Unmanned Aerial Vehicle (UAV)	• A powered, aerial vehicle that uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, and be expendable or recoverable. • Refers more specifically to the unmanned aerial vehicle itself and must be used in conjunction with a pilot, controller and wireless signal.
(12) Unmanned Aircraft System (UAS)	• Consists of an unmanned aircraft weighing less than 55 lbs., the command system, a secure control link, camera, and other related safety support equipment, including ground control base stations and specialty vehicles designed to support unmanned flight operations.
(13) Unmanned Aerial System Crewmember	• A Pilot in Command Visual Observer, or other person's assigned UAS duties for the purpose of flight.
(14) Visual Line of Sight (VLOS)	• Visual contact between PIC or VO and a UAS sufficient to maintain safe operational control of the aircraft, known location, and be able to scan the airspace in which it is operating to see and avoid other aircraft or objects aloft or on the ground.
(15) Visual Observer (VO)	• The Visual Observer is equally responsible for the visual observation of the UAS while in-flight. • The VO shall alert the PIC of any conditions (obstructions, terrain, structures, air traffic, weather, etc.) that may affect the safety of flight.

5. **LEGAL AUTHORITY**

A. Pursuant to ARS 13-3729 D.2, the city may enact or adopt ordinances or rules on the operation or use of a public unmanned aircraft owned by the city.

(1) Under this statute "a public unmanned aircraft" means an unmanned aircraft or unmanned aircraft system operated by the city for a government-related purpose (ARS 13-3729 F.6).

B. Per PCC 24-49 B.3, the Department is exempt from the operational restrictions when remotely controlled aircraft, unmanned aircraft vehicles, and unmanned aircraft systems are used for law enforcement purposes.

6. **PRIVACY AND CIVIL LIBERTIES**

A. It is the policy of the City that the operation of the UAS and all UAVS shall be carried out in a manner that respects and protects personal privacy consistent with the Unites States Constitution and Federal, State, and local law.

(1) The impact on privacy and civil liberties shall be balanced against the governmental interests leading to a deployment.

(2) The Department will only collect information and use, retain, or disseminate information obtained for a properly authorized purpose.

B. The Department prohibits the collection, use, retention, or dissemination of UAS collected information in any manner that would do any of the following:

(1) Be used or operated to violate a person's reasonable expectation of privacy, if a warrant has not been obtained, there is no exigency, and/or there is no consent.

(a) Factors that may create a reasonable expectation of privacy are:

- the location is not open to public use
- the location is privately owned, and the person on the property has the right to control access to the location and exclude others
- the location is one where the owner has taken normal precautions to maintain privacy.

NOTE: A person does not have a reasonable expectation of privacy out in public or openly accessible places, or in places that can be viewed by the normal eye.

(2) Involve prolonged or extensive tracking or surveillance, over a lengthy period, that reveals non-public information, without obtaining a warrant, in violation of a person's Fourth Amendment protections.

- When a person can conduct surveillance with authority or a warrant, a UAV or UAS can also conduct the surveillance.

(3) Violate the rights guaranteed under the First Amendment of the US Constitution and/or Article 2, § 6 of the Arizona Constitution and the right against unreasonable search and seizure under the Fourth Amendment US Constitution and/or Article 2, § 8 of the Arizona Constitution.

- In addition, UAS shall not be used to violate any constitutional right of any citizen, including Victim's Rights, due process of law, the right to petition and assembly, or the right worship or religion.

6. B. (4) Involve unnecessary stationary surveillance of a private property; that is not involved in a critical incident as outlined in the authorized uses; or of a person with a reasonable expectation of privacy, where there is no exigency or warrant.

NOTE: Incidental and transitory capture of information and images, such as aerial flyovers of homes, neighborhoods, or businesses enroute to an incident are allowable.

(5) Harass, coerce, or discriminate against persons based upon their ethnicity, race, gender, national origin, religion, sexual orientation, or gender identity, in violation of law.

(6) Utilize facial recognition surveillance technologies or software of any kind.

(7) Be for personal use of any type.

7. **UAS REMOTE PILOT SELECTION, TRAINING, AND CERTIFICATION:**

A. Department UAS will only be operated by trained, certified and FAA Part 107 licensed members of the department.

(1) Department personnel assigned to UAS operations will adhere to Title 14 of the Code of Federal Regulations, Section 107.12 (14 CFR 107.12) and will obtain UAS Remote Pilot certification.

B. The Department's Homeland Defense Bureau (HDB) Program Manager will serve as the UAS administrator.

(1) A Stand-by list of certified pilots will be maintained and requests for UAS deployment will be forwarded to the HDB Program Manager.

C. Selection - A Stand-by list of sworn and civilian pilots will be maintained to ensure the responding UAS pilot possesses the appropriate training for the requested mission.

EXAMPLE: Utilizing a sworn pilot for a tactical or exigent mission where knowledge of police tactics, officer safety, search and seizure laws would be applicable versus utilizing a civilian pilot who does not possess this training.

D. Qualified department pilot applicants will be identified and trained in accordance with existing policies.

E. Training - Training must be in accordance with existing FAA regulations.

(1) The Department requires the following minimum training of its UAS Pilot In Command (PIC)s.

(a) Personnel identified to perform UAS operations for the Department shall successfully complete the following requirements:

- Must pass the Unmanned Aircraft General (UAG) – UAS exam (a.k.a. the Remote Pilot exam) to obtain their CFR Part 107 (commonly known as Part 107) license.
- Be issued an FAA Remote Pilot certificate with a UAS rating authorized to operate UAS platforms less than 55 lbs.
- Complete additional hands-on Department flight course training.

(2) All costs for UAS Remote Pilot Certification study guide materials and certification exam costs will be funded by the Department.

7. F. Certification - The UAS pilots will meet all conditions of the Part 107 requirements for RPIC certification as defined by the FAA.

   (1) All Department personnel certified to operate UAS will be familiar with FAA Part 107 Guidelines and will maintain proficiency in their operator/observer abilities.

   (2) Personnel who do not have documented training or flight time for the preceding 90 days will be required to demonstrate proficiency before resuming duties as a pilot/observer during a mission.

   (3) Failure to maintain/demonstrate proficiency shall result in the removal of the employee from the list of certified UAS Pilots eligible for Department flight missions.

8. **UAS PROGRAM PILOTS:**

   A. Except where specifically stated in this policy, the UAS RPIC of any UAV shall be the sole person in charge of its operational use, and their decision shall be final.

   B. Only certified and trained UAS pilots shall be allowed to operate the flight controls and other equipment of the UAS.

9. **UAS Registration:**

   A. All department UAS platforms flown under Part 107 will be registered in accordance with 14 CFR 107.13. https://registermyuas.faa.gov/.

   B. The cost to register a UAS platform will be funded by the Department.

10. **UAS PROGRAM ADMINISTRATION MANAGER:**

    A. The Department's UAS program will be administered by a sworn UAS Program Manager of the rank of sergeant or higher under the HDB.

    B. The Program Manager shall:

    - Be the central point of control and oversight for the program
    - Implement the Department's UAS program and ensure compliance with all FAA Regulations, Arizona Revised Statutes, City of Phoenix Administrative Regulations (AR) and Department Operations Orders
    - Maintain oversight of individual CFR Part 107 certification of all RPIC employed by the Department, advise Department RPICs of any changes to, and ensure compliance of, CFR Part 107 as it relates to the Department's UAS utilization
    - Coordinate training and determine the operational proficiency for department RPICs
    - Coordinate requests for UAS missions in support of the Department's public safety mission

11. **SUPERVISORY CONTROL AND OVERSIGHT**

    A. Requests for UAS support require authorization by a lieutenant or higher.

    (1) Authorized requests will be made to the HDB UAS Program Manager.

    (a) The Program Manager will review the request and deploy the appropriate equipment and personnel.

11. A. (1) (b) The Program Manager will ensure the following UAS functions are completed:

- All incidents resulting in crashes, injuries, or damage will be reported by the RPIC to the Program Manager and forwarded to City Risk Management and the Legal Unit.
- The RPIC completes all flight documentation captured and inputs into the Department's UAS Mission Log Report for tracking and retention purposes.

12. **AUTHORIZED DEPARTMENTAL USE OF UAS OPERATIONS**

A. Although this list is not meant to be all inclusive, UAS may be deployed under the following conditions:

- Vehicular Crimes
- Violent Crimes/Homicide
- Crime Scene/Criminal Investigation
- Lab Evidence Collection
- Patrol/Investigative Support

B. Authorized uses for deployment of UAS platforms at crime scenes will include:

- Aerial search of crime scenes for evidence to preserve scene integrity
- Enhanced accuracy in crime scene grid GPS mapping of evidence
- Crime scene diagramming
- Aerial platform for scene photography

C. Planned/Unplanned Event Management - Department personnel from the HDB may deploy UAS under the following conditions:

- Pre-operational event planning and staffing
- Facilitating pedestrian/vehicular ingress/egress routes of travel
- Supporting operational resource management of personnel and equipment
- Providing enhanced levels of situational awareness via real-time video feed to a Tactical Operations Center or Emergency Operations Center environment
- Monitoring the safety and security of critical infrastructure during events

D. Tactical Deployment - Department personnel from the Tactical Support Bureau (Special Assignments Unit & K9) may deploy UAS under the following conditions:

- Tactical operational support
- To provide enhanced levels of situational awareness during a tactical incident
- Critical incident scene management

13. **PROHIBITED UAS USES**

A. During work shifts, Department personnel are prohibited from self-deploying or piloting any UAS platform not owned by the Department and/or for which such personnel do not possess the appropriate FAA certification to operate.

(1) All requests for UAS deployment require authorization of a lieutenant or higher and will be made to the HDB UAS Program Manager for mission review.

B. Prohibited uses may include, but are not limited to the following:

(1) Warrantless Searches – A UAS will not be operated in any environment where a search warrant is required by law.

13. B. (2) Routine Patrol - With the appropriate authorization, a UAS may be utilized to support patrol in the field with specific types of calls including, but not limited to lost or missing children/adult searches, etc.

(3) Exceed Aircraft Limitations - UAS will not be flown in conditions exceeding manufacturers recommended limitations, including range, ceiling, wind strength, and battery charge.

(4) High Risk Missions - The UAS will not be flown for any mission in which the RPIC determines the risk of flying outweighs the benefit to the mission.

(a) Risks may include hazards to individuals or property, possible collision hazards with other aircraft, and/or loss of control of the UAS.

(b) The RPIC has the sole authority in determining if the UAS mission can be flown safely.

(c) The RPIC has sole accountability for the UAS during flight operations.

(5) Operating UAS flight mission beyond Visual Line of Sight.

- All UAS missions must be flown under Line of Sight conditions

(6) Spraying or dropping any material, weaponry, or carrying or delivering Hazardous Materials.

(7) Prohibited Airspace - UAS flights are prohibited from operating in airspace above 400' AGL, unless specific authorization is received from the FAA during exigent circumstances.

(8) Unless authorized by the FAA, daisy-chaining observers to extend line-of-sight is prohibited.

(9) UAS flights are prohibited when other manned aircraft are operating within the defined incident perimeter.

(10) As a public aircraft, flying Department owned UAS for compensation or hire is prohibited; however, cost reimbursement between government units, when deployed for governmental purposes is permitted.

14. **UAS OPERATIONAL REGULATIONS**

A. Certified UAS pilots will conduct flight operations below 400' AGL and will adhere to the following flight mission restrictions, subject to all FAA authorized waivers, defined under Part 107.

- Will only operate under VLOS conditions
- Will conduct flight missions below 400 ft. AGL unless otherwise approved during the COA application process
- Will only conduct flight missions during daylight hours (sunrise to sunset) unless authorized under a night-time waiver
- Will not operate from a moving vehicle unless otherwise approved by an FAA waiver
- Flight missions will include both a certified pilot and observer throughout the duration of the flight

B. Aircraft:

(1) All Department owned UAS used for department purposes and operations must be registered with the FAA and insured by the City of Phoenix.

14. B. (2) General Airworthiness - The on-scene supervisor and the Remote Pilot in Command will be responsible for ensuring the UAS is maintained and flight ready according to the manufacturer's recommendations.

(3) Mission Specific Airworthiness - The RPIC shall be responsible for ensuring the UAS is airworthy prior to each mission.

(a) The RPIC may rely upon inspection and reports provided by agency personnel tasked with the responsibility for maintaining the UAS.

(4) Radio Frequency - The UAS shall use the assigned radio frequencies and antenna equipment authorized by the FAA during flight operations.

(5) Maintenance - Only designated personnel will be authorized to perform routine care and maintenance of Department UAS' in accordance with recommended manufacture guidelines.

- All warranty, repair, or service work will be coordinated and/or performed by the UAS HDB Program Manager or local manufacturer representative.

(6) Storage Transport - While in transit, the aircraft shall be stored in a secure manner to limit possible damage.

(7) Battery Charge - Any components necessitating a charged battery shall be charged in accordance with manufacturer's recommendations.

C. Flight Conditions:

(1) The following flight conditions must be met for UAS operational missions:

(a) Daylight - Generally, UAS operations shall normally be conducted during daylight hours; however, nighttime flight can take place if specifically authorized by the FAA under a Part 107 Nighttime Waiver or under exigent circumstances, with authorization by a lieutenant or higher.

(b) Line-of-sight - All UAS operations shall be conducted within line-of-sight of the RPIC or Observer such that the Pilot or Observer may detect and avoid hazards such as aircraft and property.

(c) Altitude - All flights shall be conducted at less than 400 feet AGL, unless otherwise approved by FAA under a Part 107 Waiver.

(d) Weather - The RPIC is responsible for obtaining current weather reports from an appropriate source, for example as denoted in the Aeronautical Information Manual.

D. De-confliction of Aircraft:

(1) All UAS flights shall be grounded upon arrival of approved manned aircraft entering the operational air space (i.e. Air Unit, etc.), if in the opinion of the RPIC the UAS mission would imperil the manned flight crew.

(2) Deconfliction shall be the responsibility of the lead RPIC of the UAS.

(3) It is the responsibility of the UAS RPIC and Flight Observer to confirm and maintain awareness of all manned aircraft activity during UAS operations.

(4) In the event a non-Department UAS is identified within the operational air space, the Lead RPIC shall notify the on-scene Incident Commander to de-conflict.

14. E. Nighttime Flight Operations:

(1) Deployments involving nighttime UAS flights may be required under the following circumstances:

(a) Special Assignments Unit response to an exigent or tactical scene.

(b) Investigative crime scene mapping in support of VCU and/or VCB
(c) In support of operations surrounding planned/unplanned special events or significant incidents

F. Flying Over People:

(1) The deployment of a UAS over people may be required as part of public safety's law enforcement mission.

(2) Effective January 2021, the FAA issued its*, Operation of Unmanned Aircraft Systems Over People Final Rule*, which allows for routine UAS operations over people.

(a) The final rule amends the existing Part 107 in Title 14 of the Code of Federal Regulations and eliminates the need for operators to receive individual Part 107 waivers from the FAA to fly over people.

(3) The safety and security of our citizens is paramount.

(a) All department RPICs will evaluate and assess potential hazards when utilizing UAS over people to ensure the public's safety and to mitigate risk for the City.

G. Operating Guidelines:

(1) The following operating guidelines will be used to determine the suitability of conditions for a UAS mission.

(a) Conditions such as heat, cold, wind, visibility, etc. will be considered in determining whether to initiate a UAS flight as determined by the RPIC.
(b) Safety of the general public will be a primary consideration in determining suitability for a UAS flight.

(2) Storage – Personnel responsible for deploying a UAS will ensure the equipment is properly secured to prevent from physical theft or damage during transport or storage.

(a) Specific consideration will be given to the following:

- UAS will not be left in vehicles during off-duty hours.
- UAS will only be stored in approved container/cases and transported in accordance with manufacturer recommendations.

(b) Every effort will be made to protect the UAS from intense heat and direct sunlight to preserve battery life and prevent propeller warping.

H. Flight Requirements:

(1) Recognizing that the RPIC has final authority to determine whether to fly a mission based upon weather and safety conditions, all UAS mission requests shall be forwarded to the HDB UAS Program Manager for review and approval given the following considerations:

(a) The location of the mission, to ensure the safety of people and property.

14. H. (1) (b) The intended area of operation, to evaluate the ability to mitigate potential air-to-air conflicts, including the current landing patterns for airports in the immediate vicinity:

- If it is determined a manned aircraft flight path is above the intended area of operation it shall be coordinated with the appropriate air-traffic control facility.
- All coordination will be done in accordance with FAA regulations as defined under Part 107.

(c) The weather and its potential effect on the aircraft, including the potential to carry the aircraft to an area of air-to-air conflict.

(d) The potential usefulness of the information to be gathered by the UAS versus through other means.

(e) Any additional relevant risk factors to successfully complete a risk benefit analysis for the use of a UAS for a specific mission.

- Risk factors may include, but are not limited to tree canopies, distance between buildings, smoke, etc.

(f) Strength of radio and GPS signal as indicated by the UAS equipment.

(2) Designation of Personnel - Once the HDB UAS Program Manager has reviewed and approved the mission with the requesting Unit, they will designate an RPIC and Observer from the Stand-by list to respond and coordinate with on-scene investigators.

(3) Pre-Flight Preparation - Before any missions are flown, the RPIC will conduct a Pre-Flight Briefing with on-scene investigators.

(4) Lost Link/GPS Procedures - Lost link is an interruption or loss of the control link between control station and the unmanned aircraft.

(a) This prevents control of the aircraft and results in the aircraft performing pre-set lost link procedures.

(b) While operating in controlled airspace, in the event of a lost link that cannot be re-established within a reasonable time, a designated crew member shall immediately notify the appropriate authority.

(c) When possible, lost link and lost GPS procedures shall comply with the following:

- The aircraft autopilot will enter a lost link mode within 10 seconds of the condition being detected, return to the landing zone or other defined lost link waypoint within the UAS operating area, and land.
- If the aircraft loses GPS, the RPIC will immediately attempt to land the aircraft in a safe location by controlling it manually or landing at the current location within the operating area.
- If both GPS and data link are lost, the aircraft will automatically land at its position and a crew member will be dispatched immediately to retrieve the aircraft.

(5) Emergency Fly Away Procedures - In the event of a fly-away or other emergency scenario while operating in controlled airspace, the designated crew member shall immediately notify the appropriate authority and provide the following information:

- The nature of the emergency
- Last known aircraft position, altitude, and direction of flight
- Maximum remaining flight time

14. I. Scene Review:

(1) The RPIC and Observer are responsible for identifying any unsafe conditions at the scene including, but not limited to:

(a) Take-off and landing site, and a flight line from which other officers and civilians must remain clear.

- The area should be free from obstructions, items on the ground, and debris that may interfere with the rotors.

(b) Flight Perimeter - The site must utilize officers and standard protocols to minimize civilian traffic or interference during UAS flight operations.

(c) Safety View - The flight team should identify trees, bushes, power lines, and other potential obstructions and coordinate the pre-flight briefing accordingly.

(d) Communication Interference - The flight team should identify cell towers, and television and microwave sources which might create interference with the flight equipment.

- The equipment should be tested on the ground to ensure proper communications and operation before the flight.
- In the event interference is observed, the flight will be suspended.

(e) Aviation/Tower Notification - The RPIC will access the LAANC online system to make all appropriate notifications to ATC about the impending mission (or as soon as possible if exigency exists) to include the following:

- The intended location, time and anticipated duration of the flight.
- The maximum altitude of the flight.
- NOTAM number (if applicable)
- A cell phone number of an individual for emergency contact.

J. Ground Safety:

(1) The UAS team will identify and secure a safe location within the operational area for UAS launch and recovery.

(2) Only flight mission essential personnel will be in proximity to UAS launch and recovery activities.

(a) When operating near populated areas, the pilot will ensure a defined incident perimeter exists to mitigate the potential for people beneath the UAS flight path when possible.

(3) The pilot and flight observer must always be aware of dangers to ground personnel from moving rotors.

(4) The pilot shall under no circumstances leave any unauthorized person in charge of the UAS controls while the UAS is running.

(5) If it is necessary for the pilot to leave the controls of the UAS, the engine will be shut down, battery removed, and the controls deactivated.

(6) A pre-flight check by the RPIC pertinent to the specific UAS to be flown will be conducted.

14. K. Weather:

(1) Prior to any launch, a thorough check of the weather will be conducted, and all members of the flight team will be made aware of the findings.

(2) Weather information can be obtained through two primary means:

- An anemometer
- FAA approved weather resources

(3) Weather information obtained during the pre-flight phase will be documented in the flight log.

15. **FLIGHT DOCUMENTATION**

A. The RPIC shall complete all department flight documentation to include pertinent information detailed below in accordance with existing department procedures:

- Aircraft used
- Flight conditions
- Type of mission
- Mission parameters
- Synopsis of incident
- Departmental Incident Report (IR) Number

B. All Mission/Flight Log information will be documented and retained for historical purposes.

16. **UAS SUPPORTING INFRASTRUCTURE**

A. The Department's use of UAS technology necessitates the development of a robust, supportive infrastructure comprised of several sub-systems integrated into the Department's UAS program.

(1) Sub-systems include, but are not limited to, the following components:

(a) Unmanned Aerial Vehicle (UAV) – The requirements of the UAV platforms selected by the Department are:

- Rotor driven and of sufficient size to meet its operational objectives and mission payload requirements
- Vertical take-off and landing capability at operational speeds of <100 mph
- Hovering or sustained flight capability will occur below 400 ft. AGL
- Utilitarian design, capable of supporting a wide range of approved modifications (i.e. enhanced optics/recording, thermal cameras, Forward Looking Infrared (FLIR), chemical/biological sensors, etc.)

NOTE: The Department ***will not*** utilize fixed wing UAVs, or UAVs greater than fifty-five (55) pounds at this time.

(b) HDB UAS Program Manager - To ensure operational readiness of the Department's UAS fleet, the Department will assign a Program Manager to oversee the routine care and control of departmental UAS including system maintenance, repair, inventory tracking, and reporting.

17. **LIABILITY INSURANCE**

A. The Department will coordinate with City Risk Management and the City's Law Department to ensure the insurance needs for all departmental UAS are met.

(1) Risk Management strongly encourages departments to notify them when purchasing UAVs, as well as when planning operations of an unusual nature or to be conducted near other jurisdictions.

18. **DOCUMENTATION**

A. Reporting of any loss or damage to Department owned UAS shall be as follows:

(1) Loss or Damage to UAV:

(a) The RPIC will immediately report any loss of or damage to any part of the UAS to the Program Manager who will ensure the incident is documented in accordance with existing department policy.

(b) The Program Manager will ensure a Departmental IR is completed detailing the circumstances of the incident, crash, or injury for forwarding to the City's Risk Management and Legal Unit for review.

(c) The Program Manager will report any incidents of logical concern or crashes to the FAA within 10 days along with any additional documentation that may be required.

(2) Flight Reporting:

(1) All reporting of UAS deployments will be completed in accordance with existing departmental policy including, but not limited to:

- Flight telemetry data from UAV deployed
- Incident Report number, date, time, location, and nature of call
- Mission Report on how UAV used, was it successful, issues/challenges
- Type of UAV deployed and Pilot information

19. **TRANSPARENCY**

A. To promote transparency about departmental UAS activities without revealing information that could reasonably be expected to compromise public safety, the Department shall:

(1) Continue to update the public and city leadership as technology evolves or changes to the UAS program.

(a) The department will utilize the Public Affairs Bureau (PAB) to collect and disseminate information on new UAS technologies and capabilities and showcase the successful use of the UAS program.

(2) Conduct flight reviews of UAS deployments detailing the department's use of UAS during operations.

(a) This information will be made available to City leadership as needed and to the general public via the Public Records Request process.

- The Department Legal Unit will assist as needed concerning specialty requests on a case by case basis.

19. A. (3) Clearly mark all Department UAVs with City inventory numbers and Police decals to identify each as a Department UAV.

B. Community Notification:

(1) The Department will make every effort to notify the public when it's likely UAS technology will be used to support pre-planned events.

(a) PAB will push notifications to the public via social media and the Department's public facing website when possible in accordance with City AR 1.56.

(b) During response to an emergency incident, it may not be possible to make advanced UAS notification to the public prior to its deployment and is subject to Public Safety exemption.

- Post-UAS deployment information can be requested via Public Records Request in accordance with Operations Order 5.5.00, Release of Records.

20. **DATA COLLECTION AND USE**

A. The information collected by the Department through the UAS will only be used official purposes.

(1) All UAS flight data will be maintained by the Program Manager.

B. Information collected that is evidentiary will be impounded in accordance with Operations Order 5.8.05, Photographs and Audio/Video Recordings.

C. Non-evidentiary information will be retained for 190 days.

21. **DATA RETENTION AND STORAGE**

A. Department personnel will utilize only hardware/software storage systems approved by the City Information Technology Services (ITS) Department and in accordance with the Department's existing policies and procedures.

(1) Only Criminal Justice Information Systems (CJIS) compliant Cloud based storage environments will be utilized by the department.

(2) Department personnel will utilize the following procedures regarding video and/or data recovered during UAS flight operations:

(a) All captured UAS digital media will be retained by the Department for (190) days following the date recorded.

(b) Captured video/data may be retained for longer time periods when:

- The video is the subject of a litigation hold, or a criminal or civil case
- The video/data is part of discovery
- The video is evidentiary in nature

22. **DIGITAL MEDIA DOWNLOAD**

A. All digital media recorded for law enforcement purposes will be downloaded at the conclusion of each flight mission.

(1) Digital media may include both photos and/or video.

22. A. (2) Any digital media captured during a flight mission that is evidentiary in nature will be detailed in an IR and impounded in accordance Operations Order 5.8.05, Photographs and Audio/Video Recordings.

23. **COPYING OR RELEASING UAS VIDEO**

A. All digital media captured using UAS technology is the City's property and the copying and/or releasing of digital media captured by the UAS without the approval of the Police Chief is strictly prohibited.

(1) Public records request will be handled in accordance with Operations Order 5.5.00, Release of Records and ARS Title 39.

24. **MISUSE/ABUSE**

A. Department personnel will follow all policies outlined in this order for UAS operations conducted by the department.

B. Any reports of misuse or abuse by department personnel operating UAS will be immediately reported to a supervisor.

(1) All complaints will be reviewed and/or forwarded to the Professional Standards Bureau for investigation in accordance with Operations Order 2.1.00, Discipline Policy and Review Boards.

(2) Department personnel who violate this policy regarding the operation of UAS will be subject to discipline in accordance with Operations Order 2.1.01, Policy Violations Index.

(3) Department personnel found in violation of this policy may be subject to removal from the UAS program.

25. **CYBER SECURITY**

A. Department personnel will follow recommendations from the City of Phoenix Chief Information Security Officer (CISO) concerning efforts to enhance cyber security as it relates to the use of UAS when deployed in a police capacity.

(1) This includes efforts to protect the UAS and any recorded data from cyber tampering or attack in accordance with relevant City ARs.

B. Department personnel shall use best practices to secure UAS from electronic tampering, including hijacking, over the command and control (C2) data link, (the wireless communication to the ground control station e.g. WiFi, Bluetooth, proprietary, or some combination thereof).

C. Department personnel will maintain an understanding of the latest threats and vulnerabilities and will ensure all manufacturer UAS cybersecurity protections are current (software updates, patches, etc.).

D. Department personnel will ensure any operational data and/or imagery data collected and stored by the department is retained in an encrypted and CJIS compliant Cloud-based environment.

Last Organizational Review: